High school students take a break from gravity while conducting science experiments aboard NASA's KC-135 research and training aircraft.

K-12 EDUCATION PROGRAMS

UNIVERSITY PROGRAMS

Undergraduate Programs

University Programs (continued)

Each National Aeronautics and Space Administration (NASA) center has established an office to provide teachers and students with a variety of education programs and services. The NASA Johnson Space Center (JSC) serves schools in Colorado, Kansas, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota and Texas. For programs and services in other states please see pages 20-21 for locations.

Following are NASA programs and services designed to support engineering, math, science and technology education. Some of these services are available nationally and some are available only in the JSC region. Many of the programs' Internet Web addresses are provided and recommended for more detailed information.

Distance Learning and Education Project (K-12)

Description:

The Distance Learning and Education Project entices learners to investigate the possibilities of applied sciences and engineering by distributing NASA-related projects, content, training, education and inspirational opportunities through distance learning technology.

Duration: One-hour events

Dates: Year-round

Application Deadline: None

Contact:

Event Coordinator
Phone: 281-244-7325
http://learningoutpost.jsc.nasa.gov/virtualtours.html

JASON Project (K-12)

Description:

The mission of the JASON Foundation for Education is to use advanced interactive telecommunications to excite and engage students in science and technology, and to provide professional development opportunities for teachers. Students participate in an annual scientific expedition. This "electronic field trip" begins with teachers participating in a workshop about the project and involving their students in the expedition through experiments and exercises during the school year.

Duration: Academic school year

Two-week spring expedition, divided into one-day events

Third-graders at Yeager Elementary School of the Cypress-Fairbanks Independent School District in Houston, Texas, make rockets of their own during a classroom visit by NASA-JSC employees.

(JASON, continued)

Dates: Academic school year

Application Deadline: None

Contact:

Ms. Delicia Slaughter
Phone: 281-483-8618
Email: eduoutre@ems.jsc.nasa.gov
http//www.jason.org

Science Advisor (SciAd) Program (K-12)

Description:

The SciAd Program provides educators with new approaches in teaching science and technology. Volunteer science and engineering professionals work with educators at designated schools on a regular basis. SciAd provides educators the opportunity to augment their science knowledge and skills while gaining a greater understanding of NASA's educational resources. The SciAd Program is currently in its second year in the Clear Creek Independent School District. Expansion to other school districts is under way.

Duration: Academic school year

Dates: Academic school year

Contact:

http://hro.jsc.nasa.gov/sciad/

NASA Student Involvement Program (NSIP) (3-12)

Description:

The NSIP is a national program of investigations and design challenges. NSIP is a wonderful opportunity for students to learn science by doing science. Students must be U.S. citizens or legal residents and currently in grades 3-12, depending upon the competition. Judging occurs regionally at NASA Centers.

Duration: Regional Winners' Trip to Washington, D.C./Five days

Dates: Late Spring

Application Deadline: January

Contacts:

Dr. Robert Fitzmaurice
Phone: 281-483-1257
Email: bob.fitzmaurice1@jsc.nasa.gov

Ms. Lynn Marra
Phone: 202-358-1529
Email: lmarra@hq.nasa.gov
http://www.nsip.net

Texas Prefreshman Engineering Program (TX PREP) (6-12)

Description:

The TX PREP is designed to increase the number of competently prepared middle and high school students who will ultimately pursue science and engineering studies at the university level, and to acquaint these students with professional opportunities in science and engineering. Selected students participate in an intensive work and study program that will reinforce their precollege studies through the development of abstract reasoning skills and problem-solving skills in mathematics, physics, computer science, engineering, and technical writing. TX PREP will be conducted at 23 college campuses throughout the state.

Duration: 10-week summer program

Dates: May/June – July/August

Application Deadline: Spring

Contact:

Manuel P. Berriozabal, Ph.D.
University of Texas at San Antonio
Division of Mathematics and Statistics
6900 North Loop 1604 West
San Antonio, TX 78249-0603
Phone: 210-458-4496
FAX: 210-459-4500
Email: mberriozabal@utsa.edu
http://www.math.utsa.edu/~prep/

High School/High Tech (9-12)

Description:

High School/High Tech is a community-based student, parent, and employer program with the purpose of encouraging students with physical, sensory or learning disabilities to pursue their interest in science, engineering and technology. Selected students are given the opportunity to participate in summer internships in their field of interest.

Duration: Program/Academic school year
Internship/5 weeks

Dates: Program/August – May; Internship/Summer

Application Deadline:
Program/Fall; Internship/Spring

Contact:

Ms. Elizabeth L. Schwartz
United Cerebral Palsy of Greater Houston
4500 Bissonnet, Suite 340
Bellaire, TX 77401
Phone: 713-838-9050
Email: ucp@ucphouston.org
http://www.ucphouston.org

KC-135 Student Flight Opportunities (9-12)

Description:

The KC-135 Student Flight Opportunities Program provides a unique academic experience for high school students to fly a reduced-gravity experiment of their choice on board one of NASA's research and training aircraft. The experience will include scientific scholarship, hands-on test operations and education/public outreach activities. Teams of up to four students, plus their faculty mentors (teachers) and journalists journey to JSC's Ellington Field for preparation and flying activities. High school teams are chosen by their Regional Science Coordinator and are U.S. citizens who are registered, full-time students at an accredited Texas high school.

Duration: One week/Houston

Dates: April

Application Deadline: December

Contacts:

Mr. Burke Fort
Phone: 800-248-8742
Email: fort@mail.utexas.edu
http://www.tsgc.utexas.edu/flyhigh/

Donn G. Sickorez, Ph.D.
Phone: 281-483-4724
Email: donn.g.sickorez1@jsc.nasa.gov

Real-world experiences at JSC include a trip through the "clean room" as students tour the facility.

Mars Settlement Design Competition (9-12)

Description:

The Mars Settlement Design Competition is an exciting industry simulation game for high school students, set in the middle of the 21st century. This weekend overnight residence program at JSC emulates the experience of working as a member of an aerospace company team developing a design and operating proposal for a new Mars base. The requirements for the new base require imaginative and innovative approaches and solutions. Students with a variety of skills will be teamed with other students to form four student competing "companies." Up to 120 high school students can participate. The students are provided with training and technical guidance to prepare their proposals, which are presented to a team of NASA and industry judges who select the winning team. Students in the Houston and southeast Texas area are eligible to participate.

Duration: Two and a half days

Dates: February

Application Deadline: January

Contact:

Mr. Norman Chaffee
Phone: 281-483-3777
Email: norman.h.chaffee1@jsc.nasa.gov
http://marsbase.jsc.nasa.gov

Texas Aerospace Scholars Program (TASP) (11)

Description:

TASP is an interactive online learning experience highlighted by a weeklong internship. Selected students are encouraged to study math, science, engineering,

(TASP, continued)

and computer science by interacting with engineers at JSC. The program includes preliminary interactive web-based activities, distance learning, and a residential experience during the summer at JSC. Two hundred students from across the state of Texas are selected to participate by their state legislator through a competitive process. Selected students are at least 16 years of age, Texas residents, and U.S. citizens currently in his/her junior year of high school (rising senior) with an interest and aptitude for math, science, engineering, or computer science.

Duration: One year

Dates: Selection/September
Web-based activities/November – May
Week-long residential experience/June – August
Continued communications with JSC engineers and NASA/September – November

Application Deadline: September

Contacts:

Ms. Rita Karl
Phone: 281-483-7158
Email: rkarl@ems.jsc.nasa.gov
http://aerospacescholars.jsc.nasa.gov
Mr. Mike Kincaid
Phone: 281-483-3065
Email: michael.a.kincaid1@jsc.nasa.gov

Summer High School Apprentice Research Program (SHARP) (11)

Description:

SHARP stimulates student interest in science and engineering careers, creating a pool of scientists and engineers for the future needs of NASA and the aerospace industry. Students work for eight weeks during the summer with a NASA mentor in a lab or office environment. Participants must be 16 years of age and U.S. citizens living within a 50-mile radius of JSC. Students with a strong aptitude for math, computers and science are chosen to take part in SHARP the summer before their senior year.

Duration: Eight weeks

Dates: June – July

Application Deadline: February

Contact:

Ms. Nancy Garrick
Phone: 281-483-3076
Email: ngarrick@ems.jsc.nasa.gov
http://students.jsc.nasa.gov/high_school/sharp.htm
or **High School Guidance Counselor**

Summer High School Apprentice Research Program (SHARP Plus) (11-12)

Description:

SHARP Plus is an intensive eight-week internship program conducted at colleges and universities with demonstrated success in the education and graduation of underrepresented minorities in science, mathematics, or engineering. Students live on a campus of a participating institution and work with researchers and mentors at nearby industrial sites or in university research laboratories where cutting-edge aerospace research is being conducted. During their apprenticeship, students carry out research assignments and participate in a variety of enrichment activities under supervision of a SHARP Plus faculty coordinator. Participants must be 16 years of age and be U.S. citizens.

Duration: Eight weeks

Dates: June – July

Application Deadline: February

Contact:

Mr. Daniel Dowds
The QEM Network
NASA SHARP Plus Program
1818 N Street, NW Suite 350
Washington, DC 20036
Phone: 202-659-1818
Email: sharpplus@qem.org
http://qemnetwork.qem.org
http://students.jsc.nasa.gov/high_school/sharp_plus.htm

Office Education (OE) Program (12)

Description:

The OE Program provides clerical job opportunities for primarily economically disadvantaged youths from communities surrounding JSC. Students work part time during their senior year in high school and full time during vacation periods and summer. Participants must be enrolled in the vocational office education program at their school. Students must be U.S. citizens and be able to perform routine clerical duties such as answering phones, typing, and filing.

Duration: Senior Year of High School/Summer

Dates: Interviews/April

Application Deadline: March

A student experiences the latest in spacewalk fashions during JASON XI "Going to Extremes" held at JSC in Spring 2000.

(OE, continued)

Contact:

Ms. Nancy Garrick
Phone: 281-483-3076
Email: ngarrick@ems.jsc.nasa.gov
http://students.jsc.nasa.gov/high_school/oe.htm

Ms. Barbara Hammond
Phone: 281-244-2037
Email: hammond@sop.usra.edu
http://cass.jsc.nasa.gov/dep/

Since its inception, NASA has enjoyed a partnership with the Nation's university communities. JSC manages programs that serve to strengthen this partnership. Our university programs offer opportunities to students, faculty and post-doctoral researchers to further their own professional growth while adding to the nation's scientific, engineering, and technological base. Some of these programs are available only from JSC while some are offered nationally.

Cooperative (Co-op) Education Program

Description:

This is the largest student program and the best path to becoming a federal employee at JSC. The Cooperative Education Program provides students with practical experience in applying the principles and theories learned in the classroom. The program benefits JSC by providing the Center with a source of future employees for science, engineering and administrative positions. Participants work alternate semesters or quarters at school with semesters or quarters (referred to as "work tours") at JSC in a paid, full-time position directly related to their field of study. Participants are full-time students, both graduate and undergraduate, with a mean grade point average (GPA) range of 3.3–3.5, and also have at least 30 semester hours from an accredited four-year educational institution.

Duration: Minimum 2-3 work tours

Dates: Determined by Student/University Co-op Manager

Application Deadline:

Mid-April/Fall semester
Mid-September/Spring semester

Contact:

Mr. Bob Musgrove
Phone: 281-483-3065
Email: coop.office1@jsc.nasa.gov
http://coop.jsc.nasa.gov

Education and Training Cooperative Program

Description:

The Education and Training Cooperative provides eligible students the opportunity to earn money for college and gain experience in the fields of business and accounting. Students are appointed for one year and appointments can be extended for an additional year (depending on the student's work performance and school status). Students work part time during the school year and have the option to work full time during vacation periods and in the summer. Eligible students are U.S. citizens and enrolled full time (12 hours) in an accredited undergraduate program from a local community college with a 3.0 GPA. Participants work at JSC but are employed by Universities Space Research Association (USRA).

Duration: Up to two years

Dates: Year-round

Application Deadline:

Mid-August/Fall semester
Mid-December/Spring semester

Contacts:

Ms. Nancy Garrick
Phone: 281-483-3076
Email: ngarrick@ems.jsc.nasa.gov
http://students.jsc.nasa.gov

Ms. Barbara Hammond
Space Program Coordinator
Universities Space Research Association
3600 Bay Area Boulevard
Houston, TX 77058-1113
Phone: 281-244-2037
Email: hammond@sop.usra.edu

GEM Scholars

Description:

The selected students are senior-level undergraduates and NASA scholars who are pursuing a graduate degree in engineering. NASA provides the undergraduate scholars the opportunity to obtain a Master of Science degree along with Fellowships. Their NASA summer research experience will help to enhance their competitiveness for the NASA Graduate Student Research Program.

Contact:

Ms. Erica Cain Ward
National Consortium of Graduate Degrees
P.O. Box 537
Notre Dame, IN 46556
Phone: 219-631-7778

KC-135 Student Flight Opportunities
(Undergraduate))

Description:

The KC-135 Student Flight Opportunities Program provides a unique academic experience for undergraduate students to fly a reduced-gravity experiment of their choice on board one of NASA's research and training aircraft. The experience will include scientific scholarship, hands-on test operations and education/public outreach activities. Participants must be U.S. citizens and registered full-time students at an accredited U.S. university. All teams travel to Ellington Field to participate in Flight Readiness Reviews and then flight. Teams are required after their flights to implement their education and outreach plans.

Duration: Two weeks/Houston

Dates: February – March

Application Deadlines: November/March

Contacts:

Mr. Burke Fort
Phone: 800-248-8742
Email: fort@mail.utexas.edu
http://www.tsgc.utexas.edu/floatn/

Donn G. Sickorez, Ph.D.
Phone: 281-483-4724
Email: donn.g.sickorez1@jsc.nasa.gov

KC-135 Student Flight Opportunities
(Community College)

Description:

The KC-135 Student Flight Opportunities Program provides a unique academic experience for community college students to fly a reduced-gravity experiment of their choice on board one of NASA's research and training aircraft. The experience will include scientific scholarship, hands-on test operations and education/public outreach activities. Teams of up to four students, plus their faculty mentors (teachers) and journalists journey to the JSC's Ellington Field for preparation and flying activities. Participants must be U.S. citizens and registered, full-time students at an accredited Texas community college.

Duration: One week/Houston

Dates: April

Application Deadlines: December

Contacts:

Mr. Burke Fort
Phone: 800-248-8742
Email: fort@mail.utexas.edu
http://www.tsgc.utexas.edu/cczero-g/

Donn G. Sickorez, Ph.D.
Phone: 281-483-4724
Email: donn.g.sickorez1@jsc.nasa.gov

NASA Training Project (NTP)

Description:

The NTP is a program designed to increase the number of scholastically well-suited, highly qualified diverse students achieving degrees in engineering, mathematics, science, or related undergraduate degrees at the University of New Mexico. Through a support system, students are allowed to maximize their ability to achieve and maintain a record of academic excellence during their undergraduate years.

Duration: Academic school year

Dates: August – May

Application Deadline: Summer

Contact:

Joseph Torres, Ph.D.
University of New Mexico
Engineering Annex 114
Albuquerque, NM 87131
Phone: 505-277-1417
Fax: 505-277-5476
Email: http://www.unm.edu/~nasadept

Lunar and Planetary Institute (LPI) Summer Intern Program in Planetary Science

Description:

The LPI Summer Intern Program in Planetary Science allows selected undergraduates to participate actively in lunar and planetary research with scientists at LPI and JSC. This program exposes undergraduate students in planetary and terrestrial studies to an actual research environment. This environment enables the students to examine and focus their career goals while encouraging their development as planetary scientists during this paid internship. College undergraduates with at least 50 semester-hours credit interested in pursuing a career in the physical sciences are eligible. Relevant disciplines include the geosciences, physics, chemistry, engineering, computer sciences, and mathematics. Selection is based in part on an applicant's profile compatibility with available research projects.

Duration: Ten-week program

Dates: June

Application Deadline: See URL below

(LPI, continued)

Contact:

Ms. Jodi Jordan
Phone: 281-486-2180
Email: jordan@lpi.usra.edu
http://www.lpi.usra.edu/lpiintern.html

National Space Grant College and Fellowship Program

Description:

The Space Grant Program, enacted by Congress in 1988 and administered by NASA, serves the nation with a broad mandate to fund research, education, and public service projects through a national network of 52 university-based Space Grant consortia. The autonomous consortia implement programs in 50 states, the District of Columbia, and Puerto Rico. Consortia membership includes over 640 affiliates, two-thirds of which are academic institutions. Other members include business and industry partners, state and local government agencies, other federal agencies, and nonprofit organizations. From 1991 to 1997, Space Grant awarded over 9,000 U.S. citizens with tuition assistance. Twenty percent of these awards were to students from underrepresented groups and forty percent were to women. Most Space Grant students' awards include a mentored research experience with university faculty or NASA scientists.

Contact:

Education Division
Mail Code FE, NASA Headquarters
Washington, DC 20546
Phone: 202-358-1531
http://calspace.ucsd.edu/spacegrant

Oral History Project

Description:

Established by JSC Director George Abbey in 1996, the primary goal of the Oral History Project is to research and interview the individuals from NASA's glorious past who enabled the exciting and challenging space programs of yesterday and today. These include the managers, engineers, scientists, technicians, doctors, astronauts, employees of NASA, and contractors who served in key roles during the early Mercury, Gemini,

Science experiments take to the skies through JSC's KC-135 student flight programs, available to high school and university students.

(Oral History Project, continued)

Apollo, and Skylab programs. Interns in the summer program conduct background research and prepare biographical profiles on project participants. Students must be U.S. citizens enrolled in a four-year college or university who have completed at least their sophomore year. Students seeking graduate degrees in history or space studies with research experience, good writing and documentation skills, and computer experience with Microsoft Word and PowerPoint are preferred.

Duration: 12 – 13 weeks

Dates: May – August

Application Deadline: See URL below

Contact:

Mr. Glen E. Swanson, Historian
Phone: 281-483-6924
Fax: 281-483-3012
Email: glen.e.swanson1@jsc.nasa.gov
http://students.jsc.nasa.gov/post_grad/oral_history.htm

Project ACCESS (Achieving Competence in Computing, Engineering and Space Science)

Description:

Project ACCESS is a summer internship program for undergraduate students with disabilities who have a strong background in math, science, or engineering and a desire to pursue technical careers. Students work with engineers and/or scientists in an area compatible with their skills and interests. This is a chance to apply academic skills in the workplace and obtain practical professional experience.

Duration: 10 weeks

Dates: Late May – August

Application Deadline: January – February

Contacts:

Ms. Laureen Summers
American Association for the Advancement of Science (AAAS)
1200 New York Avenue, NW
Washington, DC 20005
Phone: 202-326-6649
Email: lsummers@aaas.org
http://www.entrypoint.org

Ms. Jessie M. Hendrick
Phone: 281-483-1203
Email: jessie.m.hendrick1@jsc.nasa.gov
http://students.jsc.nasa.gov/under_grad/access.htm

A co-op student participates in International Space Station astronaut training exercises in the Neutral Bouyancy Lab pool at the Sonny Carter Training Facility at JSC in Houston.

Summer Clerical Program

Description:

The Summer Clerical Program provides temporary jobs to high school graduates (or equivalent) and college students. Students are given assignments of clerical and administrative positions at JSC that require the ability to type at least 40 words per minute. Applicants need to reply to the announcement for the Summer Clerical Program. Students must be U.S. citizens at least 16 years of age who are planning to attend school in the fall.

Duration: 10 – 12 weeks

Dates: Summer

Application Deadline: Mid-April

Contact:

Ms. Linda LaPradd
Phone: 281-483-3092
Email: linda.lapradd1@jsc.nasa.gov
http://coop.jsc.nasa.gov/
http://www.usajobs.opm.gov.

NASA Scholars Program

Description:

The NASA Scholars Program provides high-achieving minority students the opportunity to pursue undergraduate studies in NASA-related majors. The program is conducted through three institutions: Spelman College, under the Women in Science and Engineering (WISE) Program; Morehouse College in the Strategic Preparedness Advancing Careers in Engineering (SPACE) project; and at Florida A&M University in the Increasing Minority Access to Graduate Engineering (IMAGE) program.

The three programs provide financial assistance for tuition, room and board, books, and supplies plus placement at a NASA Center in a summer job. Summer jobs are keyed to the participant's interests and abilities as well as Center priorities. Participants must be U.S. citizens who are minority students in good academic standing at Spelman College, Morehouse College or Florida A&M University with a high school GPA of at least 3.0 and SAT scores above 1,000. Students majoring in engineering, mathematics, physics, and physical sciences are most likely to have interests that align with Center priorities. Successful candidates are offered places in the NASA Scholars program.

Contact:

Ms. Patricia F. Burke
Phone: 281-483-0606
Email: patricia.f.burke1@jsc.nasa.gov
http://students.jsc.nasa.gov/under_grad/nasa_scholars.htm

Women in Science and Engineering (WISE) Scholars

Description:

This academic and research program provides scientifically talented minority and disadvantaged women students with the opportunity to pursue undergraduate studies in science and engineering at Spelman College. It is designed to motivate students to pursue advanced degrees in science or engineering and to enter careers as scientists, engineers, or in academia.

Duration: Ten weeks
Dates: May – August
Application Deadline: Spring
Contact:

WISE Scholars Program
Dr. Cornelia Gillyard
Spelman College
Box 232, 350 Spelman Lane, S.W.
Atlanta, GA 30314-4399

(WISE Scholars, continued)

Phone: 404-223-7603
Email: cgillyard@spelman.edu
www.spelman.edu/wise/wise%20homepage.html

Program Increasing Minority Access to Graduate Engineering (IMAGE)

Description:

The program is aimed at increasing the number of minorities completing graduate degrees in engineering at Florida A&M University. The program provides financial and academic support for participants throughout their undergraduate years of study, and upon graduation, offers assistance in pursuing graduate study and employment.

Duration: Ten weeks
Dates: May – August
Application Deadline: Spring
Contact:

Florida A&M University
Ms. Crystal Gathers
Program Coordinator
Office of Engineering and Science Support
Modular Unit #1/Ardelia Court
Tallahassee, FL 32307-5900
Phone: 850-561-2267
Email: gathers_c@firn.edu

Project Strategic Preparedness Advancing Careers in Engineering/Sciences (SPACE)

Description:

The primary goal of this project is to give high-achieving students the opportunity to pursue undergraduate studies in engineering, mathematics, and physical science at Morehouse College. Participants of the program (Ronald E. McNair Scholars) are awarded scholarships that cover the cost of their undergraduate education.

Duration: Ten weeks
Dates: May – August
Application Deadline: Spring
Contact:

Morehouse College
Ms. Antoinette Ball
Program Manager
830 Westview Drive, S.W.
Atlanta, GA 30314
Phone: 404-525-6272
Email: aball@morehouse.edu
www.morehouse.edu/NASA/nasa.htm

Historically Black Colleges and Universities (HBCU)

Description:

This program awards research grants to investigators at historically black colleges and universities working in areas of interest to NASA.

Contact:

Office of Equal Opportunity Programs
Minority University Research and Education Division
NASA Headquarters/Code EU
Washington, DC 20546
http://mured.alliedtech.com/muredhomepage/hbcumain.osp

Institutional Research Awards (IRA) for Minority Universities

Description:

NASA's Office of Equal Opportunity Programs and Headquarters' technical offices invite research proposals for the IRA Program. NASA has established the IRA Program in recognition of the need to enhance cultural diversity in the Agency's research community. The Agency's objectives are to expand opportunities and to strengthen relationships with minority educational institutions, especially Hispanic-serving institutions and tribal colleges. The IRA Program provides grants to colleges and universities that currently conduct research in NASA-related fields and have a demonstrated record in graduating underrepresented minorities in science, engineering, and technology. Proposing institutions must have received $2,000,000 or less in total NASA funding during the previous fiscal year (October 1-September 30), and must meet other criteria.

Contact:

Office of Equal Opportunity Programs
Minority University Research and Education Division
NASA Headquarters, Code EU
Washington, DC 20546
http://mured.alliedtech.com/muredhomepage/ira/ira.asp

Other Minority Universities (OMU)

Description:

This program was developed to increase participation in NASA-sponsored research and education programs at institutions that are serving a substantial number of minorities, and/or women, and/or disabled students.

Contact:

Office of Equal Opportunity Programs
Minority University Research and Education Division
NASA Headquarters/Code EU
Washington, DC 20546
http://mured.alliedtech.com/muredhomepage/mured.asp

Urban Experience Program
(Undergraduate)

Description:

The Urban Experience Program is designed to prepare students for entry into the workforce by combining educational opportunities with work experience. This includes scholarships, tutoring, skill workshops, employment opportunities and contractual obligations between students, parents, and the University of Houston. Primary goal of this program is to increase the number of minority students who graduate from the University of Houston.

Duration: Academic school year
Dates: August – May
Application Deadline: Summer

Contact:

Ms. Helen Meza
Center for Mexican American Studies
University of Houston
4800 Calhoun
Houston, TX 77204-3783
Phone: 713-743-3136
Fax: 713-743-3130

Graduate Student Researcher Program (GSRP)

Description:

The program provides participants with an opportunity to broaden their background knowledge by working on a project of interest to the student, their faculty advisor and a JSC advisor. Research projects are carried out primarily at the participant's university. Students must be U.S. citizens who are in good academic standing at an accredited graduate school. Applicants who are anticipating acceptance to graduate school can apply, but acceptance to the program is contingent upon their entrance into graduate school. Selected applicants receive grants that can begin anytime between July and October.

Duration: Three years/One-year increments
Dates: Grants/June – September
Grant Amount: $22,000 a year for up to 3 years
Application Deadline: February
Contact:

Donn G. Sickorez, Ph.D.
Phone: 281-483-4724
Email: donn.g.sickorez1@jsc.nasa.gov
http://education.nasa.gov/gsrp

Project ACCESS (Achieving Competence in Computing, Engineering and Space Science)

Description:

Project ACCESS is a summer internship program for graduate students with disabilities who have a strong background in math, science, or engineering and a desire to pursue technical careers. Students work with engineers and/or scientists in an area compatible with their skills and interests. This is a chance to apply academic skills in the workplace and obtain practical professional experience.

Duration: 10 weeks
Dates: Late May – August
Application Deadline: January – February
Application Deadline: Late May – August
Contacts:

Ms. Laureen Summers
American Association for the
Advancement of Science (AAAS)
1200 New York Avenue, NW
Washington, DC 20005
Phone: 202-326-6649
Email: lsummers@aaas.org
http://www.entrypoint.org

Students explore real-world challenges through JSC co-op programs.

Aerospace Medicine Clerkships

Description:

Aerospace Medicine Clerkships provide medical students exposure to the clinical, operational, and research aspects of space medicine at NASA.

The clerkship in aerospace medicine is offered semi-annually at JSC. The clerkship involves formal lectures on space medicine topics, exposure to human testing operations, and familiarization with the medical aspects of space shuttle operations and space station design and function. The clerkship also involves a research project in a current area of space medicine focus in which the student has interest. Students with an interest in hyperbaric medicine and/or microgravity may volunteer for physiologic training in these areas pending successful completion of a NASA flight physical. Students must be in their final year of medical school and have an interest in aerospace medicine. A committee of NASA flight surgeons and biomedical engineers select students with interests and career goals in aerospace medicine. Student selections are based on academic standings, dean's recommendations and research/work experience.

Duration: Four weeks
Dates: April/October
Application Deadline: Spring
Contact:

Ms. Marjie Miller
Phone: 281-212-1356
Email: mmiller@klsiems.jsc.nasa.gov
http://students.jsc.nasa/post_grad/aero_clerk.htm

National Research Council (NRC) Resident Research Associate (RRA) Program
(Postdoctoral Scientists and Engineers)

Description:

Participants in this NASA program work for up to two years at the appropriate field center. At JSC, participants work primarily in space sciences, life sciences and engineering. Participants have a professional travel budget to help them disseminate results and are encouraged to publish in peer-reviewed publications. Applicants must have a doctoral degree in their field of expertise (usually space sciences, life sciences or engineering) and significant experience. Proposals should match an area of interest to a field center.

Duration: Work/two years
Dates: Applications reviewed February/June/October
Application Deadlines: January/April/August
Stipend: Begins at $40,000 yearly
Contacts:

Donn G. Sickorez, Ph.D.
Phone: 281-483-4724
Email: donn.g.sickorez1@jsc.nasa.gov
http://www.national-academies.org/rap
(choose "Participating Programs Link")
Ms. Jacinta Kelly
Phone: 202-334-1423
Email: jkelly@nas.edu

University of Houston Post Doctoral Aerospace Fellows Program
(Postdoctoral Scientists and Engineers)

Description:

The program provides postdoctoral scientists and engineers with research opportunities of interest to them, to JSC and the University of Houston. The program contributes to the University of Houston's educational enterprises while contributing to NASA's scientific and research missions. This program is located only at JSC in partnership with members of the University of Houston system. Participants work at JSC in space sciences, life sciences, engineering, safety/reliability, computer science, and other areas. Participants must have a doctoral degree in a relevant discipline and be U.S. citizens or holders of a green card.

During National Engineers Week, JSC employees and students at Webster Intermediate School explore rocketry by launching paper rockets powered by Alka-Seltzer® and water.

(University of Houston, continued)
Duration: Up to three years/one-year increments
Dates: Three-year intervals
Application Deadline: March
Stipend: $40,000 yearly
Contact:

David R. Criswell, Ph.D.
Phone: 713-743-9135 or 281-486-5019
Email: dcriswell@uh.edu
http://www.isso.uh.edu
Donn G. Sickorez, Ph.D.
Phone: 281-483-4724
Email: donn.g.sickorez1@jsc.nasa.gov

NASA-JSC provides a wide range of services for educators to enhance their ability to bring space-related science, engineering, mathematics, and technology topics into their classrooms. The following are brief descriptions of the educator programs and services.

Education Outreach Program (K-12)

Description:

The Education Outreach Program provides teachers within a 50-mile radius of JSC with the tools to reach and inspire their students. The program seeks to capture young people's interest in science, engineering, mathematics and technology. Over 200 JSC employees volunteer to share their knowledge and experience with teachers and students. Volunteers participate in various outreach opportunities including lecturing or performing hands-on activities in the classroom, career shadowing, tutoring, mentoring and judging at science fairs. JSC also strongly supports the National Engineers Week and the Reading Tutors Project.

Duration: Year-round

Dates: Year-round

Application Deadline:

Requests four to six weeks prior to services

Contact:

Ms. Delicia Slaughter
Phone: 281-483-8618
Fax: 281-483-4559
Email: eduoutre@ems.jsc.nasa.gov

Urban Community Enrichment Program (UCEP) (K-12)

Description:

The UCEP program provides urban youth with greater exposure to space topics in an interdisciplinary manner; motivates students to improve their reading, writing, and mathematical skills; and increases teacher and community awareness of NASA resources and technical assistance programs. The UCEP program is planned, coordinated and implemented in participating schools by a NASA team. Major activities include lectures, demonstrations, and hands-on classroom activities highlighting the various sciences that supplement the ongoing curriculum. In addition, workshops and other activities are offered to school personnel.

(UCEP, continued)

Contact:

Dr. Octavia Tripp
Urban Community Enrichment Program
Oklahoma State University
500 E Street SW, Suite 220
Washington, DC 20024-2760
Phone: 202-554-4380 ext. 243
http://aesp.nasa.okstate.edu/UCEP/UCEP.html

NASA Educational Workshops (NEW) (K-12 and Others)

Description:

There are several workshops within NEW, including NEW K-6, NEW 7-12, NEW K-12, NEW for Urban Systemic Initiative, NEW for Rural Systemic Initiative, and NEW for Informal Educators. Workshops model the integration of the national standards in mathematics, science, and technology. Qualifications include U.S. citizenship, full-time certified teacher status (depending on which NEW program), and a minimum of three years' teaching experience.

Duration:

Two weeks. One week/NEW for Informal Educators

Time: Summer (Usually)

Application Deadline: February

Contacts:

Ms. Norma D. Rhoads
Phone: 281-483-0235
Email: norma.d.rhoads1@jsc.nasa.gov
Shelley Canright, Ph.D.
Phone: 202-358-1021
Email: scanrigh@mail.hq.nasa.gov
http://www.nsta.org/programs/sst/new/nnbrochr.html

Aerospace Education Services Program (AESP) Professional Development Workshops (K-12)

Description:

NASA's AESP is for in-service and preservice classroom teachers from all subject areas as well as administrators and curriculum directors. AESP is a nationwide program designed to enhance educator awareness and understanding of scientific research and technological development. Workshops are provided at no cost to schools, district offices, education service centers, professional development centers, etc., in the JSC eight-state service region of Colorado, Kansas, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, and Texas. The workshops introduce participants to NASA curriculum support materials, videos, hands-on activities and available technology products. Workshops can usually accommodate 12 to 30 participants.

Duration: Two to four days as requested

Dates: Year-round

Application Deadline:

Six to nine months prior to services

Contact:

AESP Office
Phone: 281-483-8619
Fax: 281-483-4559
http://aesp.nasa.okstate.edu/jsc/jscinfo.html

Summer Faculty Fellowship Program (Full-time College and/or University Faculty Members)

Description:

The Summer Faculty Fellowship Program provides qualified science and engineering faculty members with an opportunity to further their professional knowledge, contribute to NASA research projects, and strengthen the relationship between JSC and the academic community. Researchers work full time, summers only, on problems of mutual interest to both JSC and the researcher. Participants must be full-time college and/or university faculty members teaching at U.S. institutions, who are U.S. citizens.

Duration: 10 weeks/full-time work

Stipend: $1,000 per week

Dates: Late May – August

Application Deadline: February

Contacts:

William Hyman, Ph.D.
Phone: 281-244-7156
Email: w-hyman@tamu.edu
Richard Bannerot, Ph.D.
Phone: 713-743-4511
Email: rbb@uh.edu
Donn G. Sickorez, Ph.D.
Phone: 281-483-4724
Email: donn.g.sickorez1@jsc.nasa.gov
http://www.asee.org/fellowship/html/nasa.htm

Central Operation of Resources for Educators (CORE) (K-12)

Description:

NASA's CORE is a worldwide distribution center for NASA's audiovisual educational materials. For a minimum fee, NASA CORE will provide educators with materials through its mail order service. Educational materials available include videotape programs, slide sets, computer software, and laser discs. NASA CORE is a nonprofit organization jointly sponsored by NASA and the Lorain County Joint Vocational School in Oberlin, Ohio. Educators may request a catalog and order form by writing or calling.

Contact:

NASA CORE
Lorain County JVS
5181 Route 58 South
Oberlin, OH 44074
Phone: 216-774-1051, ext. 293/394
Fax: 216-774-2144
Email: nasaco@leeca.org
http://core.nasa.gov/

Educator Resource Center (ERC) (K-12)

Description:

The ERC provides all public, private, charter, and home school teachers within JSC's eight-state region with curriculum enhancement materials to help expand students' science, math, and technology skills and competence levels. JSC has hundreds of free curriculum materials, brochures, posters, fact sheets, and Internet online educational resources for educators. Educational videotapes can also be viewed and copied free of charge when the teacher brings in blank videotapes. Consulting sessions, workshops, and Internet training are provided to any educator requesting a workshop. Trained, certified teachers are available during the week to conduct these sessions and help teachers implement curriculum. The ERC is located at Space Center Houston, adjacent to JSC. Teachers out of the area can utilize the ERC by telephone using the toll free number listed below.

Duration: Year-round

Dates: Weekdays/10 a.m. – 5 p.m.
Closed during workshops/Otherwise walk-ins welcome
Weekends/Appointments available upon request
Call ahead for daily availability information

(ERC, continued)

Application Deadlines:

Prefer two days' notice for workshops

Contact:

Ms. Cindy McArthur
Phone: 281-244-2129 or 800-972-0369 x2129
Fax: 281-483-9638
Email: cynthia.l.mcarthur1@jsc.nasa.gov
http://spacelink.nasa.gov/ercn/

A class joins NASA researchers as they test the Marsokhod rover on terrain similar to that of the red planet.

Information Services Center (ISC)

Description:

The ISC replies to inquiries and requests for NASA information from individuals and educational institutions. Educators may request information for workshops, events, and classrooms. Students and the general public may write individually to the ISC at the address below for information or answers to questions about the U.S. Human Space Flight Program. Educators may group letters written by their class and send them with a cover letter to the ISC and receive a classroom package with an item enclosed for each of the students. To enable us to select and mail the appropriate materials, please contact us in advance. Event coordinators may request materials by contacting the ISC at the address below.

Dates: Year-round

Duration: Weekdays/8 a.m. – 5 p.m.

Application Deadline:

Four weeks prior to date information needed

Contact:

Information Services Center
NASA Johnson Space Center
2101 NASA Road 1/AP2
Houston, TX 77058-3696
Email: infoserc@ems.jsc.nasa.gov

Lunar and Meteorite Sample Educational Disks Program

Description:

The Lunar and Meteorite Sample Educational Disks Program is available to program-certified educators. This program consists of six samples of lunar material (three soils and three rocks) encapsulated in a six-inch-diameter, one-inch-thick clear Lucite disk. The disk is accompanied by written and graphic descriptions of each sample in the disk; a slide presentation with script; and a teacher's guide with activities for Earth and space sciences. This program is used as a science teaching aid in a classroom environment. Museums and planetariums that schedule educational programs may also request the disk for use. The disk must be secured while not in use in a safe or vault-type safe or cabinet with a bar and combination lock; must be sent via registered mail to and from locations; and must be under constant surveillance while in use. Contact the Education Program Officer at the appropriate NASA Center for further information.

Dates: Year-round

Duration: Weekdays/8 a.m. – 5 p.m.

Application Deadline:

Four weeks prior to date information needed

Contact:

Lunar and Meteorite Sample Disks Program
NASA/Johnson Space Center
2101 NASA Road 1/HA
Houston, TX 77058-3696

Program certification Contact:

Aerospace Education Services Program (AESP)
NASA Johnson Space Center
2101 NASA Road 1
Houston, TX 77058-3696

NASA Opportunities for Visionary Academics (NOVA)

Description:

NOVA was created to develop and disseminate a national framework for enhancing science, mathematics and technology literacy for preservice teachers in the 21st century. The NOVA consortium consists of a network of 42 member institutions who are working to produce enhanced scientific literacy for preservice teachers. This effort is being accomplished through the demonstration of an undergraduate science and mathematics course framework, examples of successful course models, and a mentoring support system for faculty wishing to implement new courses or modify existing courses at their universities. The framework uses interactive learning and integrates science, mathematics and technology as a means of developing a new paradigm for educating preservice teachers.

NOVA invites the participation of science, engineering, technology, mathematics, and education faculty who are concerned with how universities prepare new teachers. Using the NASA mission, facilities, and resources, NOVA will provide faculty with enhanced knowledge and skills to implement change in university courses.

Contact:

NOVA
Dr. L. Michael Freeman
NOVA Coordinator
Aerospace Engineering and Mechanics
The University of Alabama
Box 870280
Tuscaloosa, AL 35487-0280
Phone: 205-348-7304
Fax: 205-348-7240
Email: nova@coe.eng.ua.edu
Lourena Richardson
Administrative Assistant
Phone: 205-348-6010

NASA Spacelink

Description:

NASA Spacelink is one of the Agency's electronic resources specifically developed for use by the educational community. This comprehensive electronic library contains current and historical information related to NASA's aeronautics and space research. Teachers, faculty, and students will find that Spacelink offers not only information about NASA programs and projects, but also teacher guides with activities, images, and computer software that can enhance classroom instruction.

Spacelink also provides links to other NASA resources on the Internet. Educators can access materials chosen specifically for their educational value and relevance, including science, mathematics, engineering and technology education lesson plans, information on NASA educational programs and services, current status reports on Agency projects and events, new releases, and television broadcast schedules for NASA Television.

Contact:

NASA Headquarters
Education Division
Mail Code FE
Washington, DC 20546
Email: comments@spacelink.nasa.gov
http://spacelink.nasa.gov/index.html

NASA Television (NTV)

Description:

NTV is the Agency's distribution system for live and taped programs. It offers the public a front-row seat for launches and missions, as well as informational and educational programming, historical documentaries, and updates on the latest developments in aeronautics and space science.

NTV's educational programming is aimed at inspiring students to achieve, especially in science, mathematics, and technology. If your school has access to NTV through a cable television system or a satellite dish, you may downlink and videotape all programs. Daily and monthly programming schedules for NTV are available at the Internet address listed below.

Tune in to NTV via satellite:

GE-2; 85o W; C-band; vertical polarization;
Transponder 9C; 3880 MHz, Audio 6.8 MHz

The Distance Learning and Education Program provides a virtual learning adventure with NASA experts right in the classroom through teleconference technology.

(NASA Television, continued)

Contact:

NASA TV
NASA Headquarters
Mail Code P-2
Washington, DC 20546
Phone: 202-358-3572
http://spacelink.nasa.gov/NASA.News/NASA.Television.Schedules/

Space Act Agreements

Description:

The Space Act Agreements support or stimulate basic research of interest to JSC. Space Act Agreements are used in situations where each party has a mutual interest or active part in accomplishment of research. They generally do not involve an exchange of funds between JSC and the university, but do involve the exchange of resources, use of equipment, and the use of unique facilities. They usually cover periods of time from one to three years. Accredited U.S. educational institutions, as well as businesses and other governmental concerns, are eligible. Selections are made based on mutual interests and benefits to both parties.

Contact:

In the scientific and technical organizations, directorate-level individuals usually have the authority to establish Space Act Agreements with non-NASA constituents. Your technical contact within the NASA organization will be able to guide your selection.

Space Center Houston

Description:

Space Center Houston is the official visitor's center for NASA's JSC and provides guests with tours of the JSC site. Space Center Houston is dedicated to igniting the understanding and interest of students, educators and the general public in science, mathematics and technology through fun, hands-on programs and activities.

Contact:

Space Center Houston
1601 Nasa Rd 1
Houston, Texas 77058
Phone: 281-244-2105 or
Fax: 281-283-7724
http://www.spacecenter.org/

Transfer of Excess Government Property to Schools

Description:

The Stevenson-Wydler Act authorizes NASA centers to donate excess research equipment to accredited educational institutions for conducting technical and scientific education and research activities. Eligible organizations include elementary, middle, and high schools; two-year and four-year colleges; and universities. These educational institutions may be public, private, or parochial schools with state-approved registration. The education-related Federal equipment includes excess or surplus personal computers and related peripheral equipment, research equipment, and equipment that is appropriate for use in mathematics and science curricula. Acquiring educational institutions are responsible for costs associated with removing equipment.

Contact:

Property and Equipment Branch
NASA Johnson Space Center
2101 NASA Road 1/JB3
Houston, TX 77058
Phone: 281-483-6524

For more information on NASA's university education programs and resources, please contact:

Mr. Geoffrey Lee
University Affairs Officer
NASA Ames Research Center/Mail Stop 19-1
Moffet Field, CA 94035-1000

Dr. Kajal Gupta
University Affairs Officer
NASA Dryden Flight Research Center
P.O. Box 273, MS-D2131
Edwards, CA 93523-0273

Dr. Francis J. Montegani
University Affairs Officer
NASA Glenn Research Center at Lewis Field
21000 Brookpark Road/CP-1
Cleveland, OH 44135-3191

Dr. Gerald Soffen
University Affairs Officer
NASA Goddard Space Flight Center/Code 160
Greenbelt, MD 20771-0001

Dr. Donn G. Sickorez
University Affairs Officer
NASA Johnson Space Center
2101 Nasa Road 1/AH2
Houston, TX 77058-3696

Mr. Gregg Buckingham
University Affairs Officer
NASA Kennedy Space Center/Attn: HM-CIU
Kennedy Space Center, FL 32899-0001

Mr. Roger Hathaway
University Affairs Officer
NASA Langley Research Center/Mail Stop 400
Hampton, VA 23681-0001

Dr. Shelia Nash-Stevenson
University Affairs Officer
NASA Marshall Space Flight Center/Mail Stop CD60
Huntsville, AL 35812-0001

Dr. Ramona E. Pelletier Travis
University Affairs Officer
Science and Technology Branch
NASA Stennis Space Center
Stennis Space Center, MS 39529-6000

Ms. Carol Hix
University Affairs Officer
NASA Jet Propulsion Laboratory
4800 Oak Grove Drive/Mail Stop 180-109
Pasadena, CA 91109-8099

For more information on NASA's education programs and resources available to educators, please write:

HOME STATE	EDUCATOR RESOURCE CENTER	EDUCATION PROGRAMS OFFICE
Alaska Hawaii Idaho Montana Nevada Northern California Oregon Utah Washington Wyoming	**NASA Ames Research Center** Educator Resource Center/ Mail Stop T253-2 Moffet Field, CA 94035-1000 **650-604-3574** http://ccf.arc.nasa.gov/dx/basket/trc/trchome.html	**Mr. Garth A. Hull** Educational Programs Group Leader NASA Ames Research Center/ Mail Stop 204-12 Moffet Field, CA 94035-1000
Arizona Southern California Kern, San Bernardino and San Luis Obispo Counties	**NASA Dryden Flight Research Center** Educator Resource Center 45108 North Third Street East Lancaster, CA 93535 **661-948-7347** http://www.dfrc.nasa.gov/trc/ERC/	**Dr. Marianne McCarthy** Education Specialist Dryden Flight Research Center/ Mail Stop D4839A Edwards, CA 93523-0273
Illinois Indiana Michigan Minnesota Ohio Wisconsin	**NASA Glenn Research Center** Educator Resource Center 21000 Brookpark Road/Mail Stop 8-1 Cleveland, OH 44135-3191 **216-433-2017** http://www.grc.nasa.gov/www/pao/html/edteachr.htm	**Ms. Jo Ann Charleston** Acting Chief, Office of Educational Programs 21000 Brookpark Road Mail Stop 7-4 Cleveland, OH 44135-3193
Connecticut Delaware District of Columbia Maine Maryland New Hampshire New Jersey New York Pennsylvania Rhode Island	**NASA Goddard Space Flight Center** Educator Resources Laboratory Mail Code 130.3 Greenbelt, MD 20771-1000 **301-286-8570** http://pao.gsfc.nasa.gov/gsfc/educ/trl/welcome.html	**Dr. Robert Gabrys** Chief, Education Office NASA Goddard Space Flight Center/Code 130.3 Greenbelt, MD 20771-0001
Virginia's Eastern Shores	**NASA Goddard Space Flight Center** Wallops Flight Facility Education Complex-Visitor Center Educator Resource Lab Bldg. J-17 Wallops Island, VA 23337-5099 **804-824-2298**	
Colorado Kansas Nebraska New Mexico North Dakota Oklahoma South Dakota Texas	**NASA Johnson Space Center** Educator Resource Center Space Center Houston 1601 NASA Road 1 Houston, TX 77058-3696 **281-244-2129 or** **800-972-0369 Ext. 2129** http://www.spacecenter.org/educator_resource.html	**Mr. Mike Kincaid** Chief, Education and Student Programs Branch NASA Johnson Space Center 2101 NASA Road 1/AH2 Houston, TX 77058-3696

HOME STATE	EDUCATOR RESOURCE CENTER	EDUCATION PROGRAMS OFFICE
Florida Georgia Puerto Rico Virgin Islands	**NASA John F. Kennedy Space Center** Educators Resources Laboratory/ Mail Code ERC Kennedy Space Center, FL 32899 **321-867-4090**	**Ms. Pam Biegert** Deputy Director, Education Programs NASA Kennedy Space Center/ Mail Code XA-D Kennedy Space Center, FL 32899-0001
Kentucky North Carolina South Carolina Virginia West Virginia	**NASA Educator Resource Center for Langley Research Center** Virginia Air and Space Center 600 Settlers Landing Road Hampton, VA 23669-4033 **757-727-0900 ext. 757** http://www.vasc.org/erc	**Dr. William B. Williams** Center Education Program Officer NASA Langley Research Center/ Mail Stop 400 Hampton, VA 23681-0001
Alabama Arkansas Iowa Louisiana Missouri Tennessee	**NASA Educator Resource Center for Marshall Space Flight Center** U.S. Space and Rocket Center One Tranquility Base Huntsville, AL 35805 **256-544-5812** http://www1.msfc.nasa.gov/ education/erc	**Ms. Alicia Beam** Precollege Officer NASA Marshall Space Flight Center/Mail Stop CD60 Huntsville, AL 35812-0001
Mississippi	**NASA Stennis Space Center** Educator Resource Center Building 1200 Stennis Space Center, MS 39529-6000 **228-688-3220** http://education.ssc.nasa.gov/ htmls/trc/trc.htm	**Ms. Wanda F. DeMaggio** Education Programs Manager NASA John C. Stennis Space Center/Mail Stop AAI0 Stennis Space Center, MS 39529-6000
The Jet Propulsion Laboratory (JPL) serves inquiries related to space and planetary exploration.	**NASA Jet Propulsion Laboratory** Educator Resource Center Village at Indian Hills Mall 1460 East Holt Avenue, Suite 20 Pomona, CA 91767 **909-397-4420** http://eis.jpl.nasa.gov/eao/trc.html	**Mr. David Seidel** Precollege Officer Education Affairs Office Mail Stop 180-109 Jet Propulsion Laboratory 4800 Oak Grove Drive Pasadena, CA 91109-8099